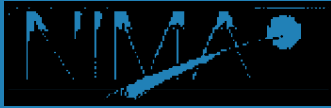




NITF Imagery Compression Users Handbook

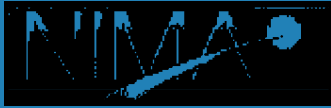
Overview & Status Briefing

NTB - 4 March 1998



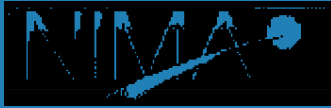
Purpose

- To provide a handbook for non-technical users
 - Present NITFS family of documents are directed toward technical audiences, e.g., scientists, engineers, mathematician's and other technical disciplines
 - Words and phrases like pixel, bits per pixel, Huffman tables, Q Tables, RGB, CMYK, lossy, lossless, and complex mathematical formulas are presented at what appears to be a level inappropriate for a non-technical user
 - If a user does not know what a pixel is, how can we expect them to understand compression presented as some number of bits per pixel?
- This handbook will address these issues and present them in terms an average user can comprehend



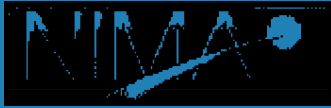
Scope

- Compression in general will be addressed
 - Lossless/lossy
 - When and why to use compression
 - When not to use compression
 - Different types of compression (proprietary/commercial)
- NITF Algorithms
 - JPEG
 - Lossless/Lossy
 - Q Tables
 - Huffman Tables
 - Pre/Post Processing
 - Downsampled JPEG
 - Bi-level
 - VISP1.21



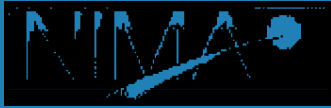
Scope (continued)

- National Image Compression
- Other Compression Algorithms
 - Wavelets
 - Fractals
- JPEG 2000
- Example images (EO/IR/SAR) will be depicted for each algorithm (majority of settings)
 - Uncompressed and compressed
 - Color and MSI will be included
- Uncompressed image files will be provided in document so user can conduct own experiments



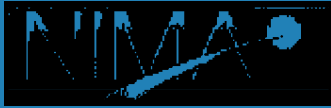
Scope (continued)

- NITF will be addressed (Background/History/Format)
- Delivery media
 - Hard Copy
 - CD-ROM
 - WWW
-



Status

- Outline approved
- Document development on-going
- Scheduling trips to JITC and Eastman Kodak for information



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